

Invasive Spinal Interventions for the Treatment of Head Pain Outside Occipital Nerve Distribution

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Objectives: Head pain in non-cervical nerve distribution, i.e. in the face or eye, can stem from a source in the neck (1). Fredriksen et al.'s manifestations of cervicogenic headache featured periorbital pain in their entire series of 11 cases (2). Our objective is to demonstrate that facial pain can respond to invasive interventions in the neck with consistently successful outcomes.

Methods: Retrospective analysis of all consecutive headache cases referred to Pain Clinic over a period of 6 years. All cases had at least 3 months' history at first presentation. Minimum follow-up period was 6 months.

Inclusion: Pain in the face and/or eye irrespective of *ICHD-3 beta* class including *ICHD-3 beta 11.2.1* (cervicogenic headache) and *ICHD-3 beta 13.4* (occipital neuralgia). **Exclusion:** Secondary headaches (*ICHD-3 beta groups 6-12*) **except** neck-related. Also excluded were trigeminal neuralgia and minor cases with headache not among the main complaints.

Clinical Management : Combination of cervical spinal exercises, repeat cervical medial branch and/or occipital nerve blocks, Fig 2 (bupivacaine, no steroids). 13 patients underwent RF neurotomy of C2- 4 medial branches (4), Fig 3.

Definition of Outcomes: The outcomes are presented categorically as success or failure (3). Success is defined as complete/near-complete resolution of the headache with functional recovery and remission uninterrupted or, in recurrence, reinstated. Patients who had a clinically significant, but non-complete improvement are presented as failures.

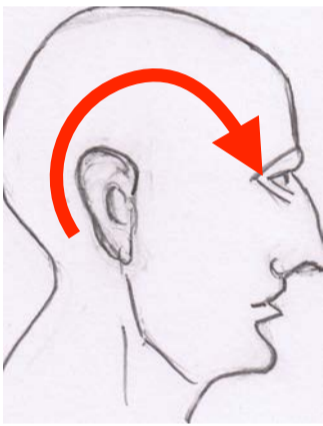


Fig 1. Occipital trajectory



Fig 2. Medial branch block



Fig 3. RF neurotomy

Distribution of Pain:

Unilateral	Periorbital	Temple	Maxilla	Mandible	Occipital trajectory, Fig1
98%	69%	36%	30%	30%	69%

Outcomes (n cases):

Total	Ongoing	Lost to FU	Success	Failure
48	8	6	26	8

Results/Conclusion: 48 cases were selected, aged 25-81, median 54, with successful outcome in 76% of completed cases (*see definition of outcomes*). A cervical source of facial pain is common and can respond to invasive interventions with a sustained remission not requiring medication.

References:

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- 3.Bogduk N. Editor's Response: Group vs Categorical Data in Epidural Studies. *Pain Med* 2014;15 (10):1812-13
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